

ABSTRACT

A diester represented by the formula



- wherein A represents a cyclohexane ring, cyclohexene ring  
5 or benzene ring, X is H or methyl group,  $\text{R}^X$  and  $\text{R}^Y$  are the  
same or different and each is C3-C18 branched-chain alkyl  
group, C1-C18 straight-chain alkyl group, C2-C18 straight-  
chain alkenyl or C3-C10 cycloalkyl, provided that when A is  
a benzene ring,  $\text{R}^X$  and  $\text{R}^Y$  are different from each other and  
10 -COOR<sup>X</sup> and -COOR<sup>Y</sup> are attached to two adjacent carbon atoms  
of the benzene ring, and having the following properties:
- 1) a total acid number of 0.05 mgKOH/g or less,
  - 2) a sulfated ash content of 10 ppm or less,
  - 3) a sulfur content of 20 ppm or less,
  - 15 4) a phosphorus content of 20 ppm or less,
  - 5) a peroxide value of 1.0 meq/kg or less,
  - 6) a carbonyl value of 10 or less;
  - 7) a volume resistivity of  $1 \times 10^{11} \Omega \cdot \text{cm}$  or more,
  - 8) a hydroxyl value of 3 mgKOH/g or less, and
  - 20 9) a water content of 100 ppm or less,
- a process for preparing the same and a refrigerator  
lubricating oil comprising the diester.